COOPERTIRES

COOPER TIRE & RUBBER COMPANY
3500 Washington Rd. • Texarkana, AR 71854 • Phone (870) 773-4502

May 6, 2013

Arkansas Department of Environmental Quality
Water Division - Enforcement Branch
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

RE: Cooper Tire & Rubber Company – AFIN: 46-00005 - NPDES Permit Number AR0038822
Discharge Number 001-A

Dear Sir or Madam:

The above-referenced permit requires that the Cooper Tire & Rubber Company Texarkana, Arkansas plant monitor specific effluent characteristics for Outfall 001. Enclosed is the Discharge Monitoring Report for the period.

Part III.D.7. of the subject permit require that all instances of noncompliance with the effluent characteristics limitations are reported at the time the DMR form is submitted. A non-compliance report form is also attached.

If you have any questions or require additional information, please contact Charles Allen at (870) 779-4260.

Sincerely,

J. Scott Cole
Plant Manager

Encl.

NON-COMPLIANCE REPORT

Arkansas Department of Environmental Quality
NPDES Enforcement Section
5301 Northshore Drive
North Little Rock, AR 72118

RE: NPDES Permit No: AR0038822 Discharge Number: 001-A

Facility: Cooper Tire & Rubber Company

Address: 3500 Washington Road

City: Texarkana State: AR Zip: 71854

Contact: Charles Allen Phone: 870-779-4260

Date of Non-Compliance	Parameter Exceeded	Quantity or Loading	Quality or Concentration	Permit Limits
4/10/13	Zinc, Total	—	183 ug/L	133 ug/L AVG

We feel this problem was due to:
Accumulation of fugitive dust from the rubber miking process and contribution of background concentrations of zinc

We plan on correcting the problem in this manner:
Continue targeted housekeeping of the mixing process and maintain BMPs in place to minimize potential for zinc releases.

Time estimated that it will take to correct problem:
There is no known time to correct the problem. This is a historical issue with engineering studies indicating there is no feasible solution to meet current permit limits.

Sincerely,

Authorized Signature

5/13/13
Date

COOPERTIRES

COOPER TIRE & RUBBER COMPANY
3500 Washington Rd. • Texarkana, AR 71854 • Phone (870) 773-4502

May 6, 2013

Arkansas Department of Environmental Quality
Water Division - Enforcement Branch
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

RE: Cooper Tire & Rubber Company – AFIN: 46-00005 - NPDES Permit Number AR0038822
Discharge Number TX1-B

Dear Sir or Madam:

The above-referenced permit requires Cooper Tire & Rubber Company Texarkana, Arkansas plant to complete routine bio-monitoring sampling at Outfall 001. The permit requires reporting the Lethal No Observed Effluent Concentration (NOEC) for *Pimephales promela*. During the sampling events for the reporting period, the facility reported the required survival rate for *P. promela* at the 100% concentration level. Enclosed is the Discharge Monitoring Reports for the reporting period as required by the discharge permit AR0038822.

Respectfully,

J. Scott Cole
Plant Manager

Encl.

605898 CoC Print Group 001 of 002

Bio-Aquatic Testing, Inc.

TCEQ NELAP Accredited

Ana-Lab
Cooper Tire & Rubber Co.
OUTFALL NPDES 001

48 Hr Acute Biomonitoring Report

51569

Pimephales promelas

March 12, 2013

Approved by: Chr. Robason

Chris Robason,
President

Bio-Aquatic Testing, Inc. • 2501 Mayes Rd. Ste. 100 • Carrollton, Texas • 75006

TABLE OF CONTENTS

***HAND-WRITTEN RAW DATA TABLES ARE AVAILABLE UPON REQUEST**

BIO-AQUATIC TESTING, INC.
2501 Mayes Road, Suite 100
Carrollton, Texas 75006
Tel: (972) 242-7750
Fax: (972) 242-7749

TOXICITY TEST REPORT - 48 Hr Acute

Client:	Ana-Lab	Sample:	NPDES 001
Facility:	Cooper Tire & Rubber Co.	Laboratory Number:	51569
Permit No.	AR0038822	Date:	March 12, 2013

Pimephales promelas **passed** survival testing requirements.

SAMPLE COLLECTION:

Composite effluent samples from Ana-Lab, Cooper Tire & Rubber Co., were transported to Bio-Aquatic Testing via Greyhound. Samples were received on March 12, 2013 and March 13, 2013. Effluent samples were collected from Outfall NPDES 001 by facility personnel.

The effluent samples were analyzed for total residual chlorine using the Hanna Ion Specific Meter #193711 and contained <0.10 mg/L and <0.10 mg/L, respectively. Effluent and laboratory dilution water pH, temperature, and dissolved oxygen data were collected daily.

TEST PROCEDURES:
Pimephales promelas

EPA METHOD: 2000

The 48 Hr Acute *Pimephales promelas* test was initiated at 18:00 hours on March 12, 2013. Five effluent concentrations of 32%, 42%, 56%, 75%, and 100% were prepared utilizing synthetic water The test was set up with 450mL plastic cups containing 250mL of test solution as test chambers. Each concentration or control consisted of five replicate chambers containing eight organisms each, giving a total of 40 (forty) per treatment. The control was conducted concurrently with the test. Test organisms were laboratory cultured *P. promelas* eight days old, and all larvae used in each test are hatched within 24 hours of each other. The number of surviving larvae and water quality parameters were recorded after each 24 hour period. The test was renewed daily with fresh solutions. Surviving larvae in each test chamber were fed freshly hatched brine shrimp two times per day. The test proceeded for 48 hours. The test ended at 14:00 hours on March 14, 2013. Survival data was statistically (p=0.05) analyzed according to EPA procedures to determine the Lowest Observable Effect Concentration (LOEC) and the No Observable Effect Concentration (NOEC).

SURVIVAL:

Pimephales promelas

The *Pimephales promelas* survival data failed Shapiro Wilk's test for normality at the 0.01 (0.900) alpha level after the arc sine (square root (Y)) transformation. Bartlett's test for homogeneity is sensitive to non-normal data and should not be performed if data fails Shapiro Wilk's test. The non-parametric Steel's Many-One Rank test performed on *Pimephales promelas* survival data demonstrated no statistically significant differences between the control and any of the effluent concentrations tested.

LOEC: Not Calculable (Q)
NOEC: 100% Effluent

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BIO-AQUATIC TESTING, INC.

TOXICITY TEST

48 Hr Acute *Pimephales promelas*

Lab ID: 51569

Client: Ana-Lab Cooper Tire & Rubber Co.

Test Temperature (oC): 25 ± 1

Permit Number: ADPCE AR0038822

Photo Period: 16 hours light 8 hours dark

Sample Type: Composite **Outfall Name:** NPDES 001

Receiving Water Name:

Begin Date: 3/12/2013

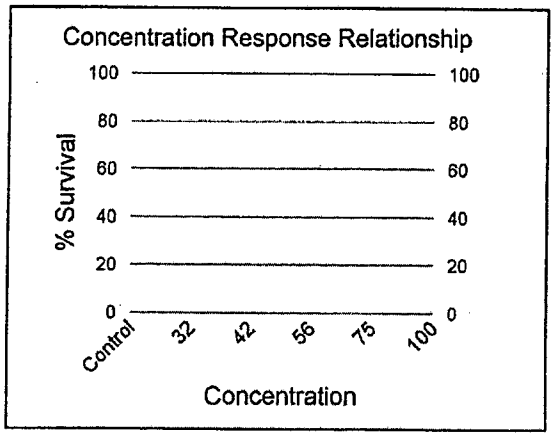
End Date: 3/14/2013

Test Start Time: 18:00 Test End Time: 14:00

SURVIVAL

Effluent Con. %	Number Of Alive Per Replicate															Avg% Surv.
	3/12					3/13					3/14					
	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	
Control	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	100.0%
32	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	100.0%
42	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	100.0%
56	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	100.0%
75	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	100.0%
100	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	100.0%

*spilled cup



APPENDIX A

STATISTICS SUMMARY

Both the lethal and sub-lethal endpoints were statistically calculated according to their respective EPA guidelines. The Chronic Freshwater organisms were calculated according to EPA-821-R-02-013, October 2002 Fourth Edition. The Chronic Marine and Estuarine organisms were calculated according to EPA-821-R-02-014, October 2002 Third Edition. The Acute Freshwater and Marine organisms were calculated according to EPA-821-R-02-012, October 2002 Fifth Edition. Listed below are the basic principles of these guidelines. If you would like a copy of the raw statistical calculations for your test then please contact us.

The chronic and acute *Pimephales promelas* and *Menidia beryllina* survival data is analyzed using Shipiro Wilks Test and Bartlett's Test. If the data passes both tests then the data is run through ANOVA and Dunnetts (parametric). If the data fails Shipiro Wilks Test or Bartlett's Test then Steels Many One Test (non-parametric) is used. The chronic *Pimephales promelas* and *Menidia beryllina* growth data is analyzed using Shipiro Wilks Test and Bartlett's Test. If the data passes one of these tests then the data is run through ANOVA and Dunnetts. If the data fails Shipiro Wilks Test and Bartlett's Test then Steels Many One Test is used.

The chronic *Mysidopsis bahia* survival data is analyzed using Chi-square test and Bartlett's Test. If the data passes both tests then the data is run through ANOVA and Dunnetts. If the data fails Chi-square test or Bartlett's Test then Steels Many One Test is used. *Mysidopsis bahia* growth data is analyzed using Chi-square test and Bartlett's Test. If the data passes one of these tests then the data is run through ANOVA and Dunnetts. If the data fails Chi-square test and Bartlett's Test then Steels Many One Test is used.

The acute *Mysidopsis bahia* survival data is analyzed using Shipiro Wilks Test and Bartlett's Test. If the data passes both tests then the data is run through ANOVA and Dunnetts. If the data fails Shipiro Wilks Test or Bartlett's Test then Steels Many One Test is used.

The chronic *Ceriodaphnia dubia* survival data are analyzed using the Fisher's Exact Test. The chronic *Ceriodaphnia dubia* reproduction and are analyzed using the Chi-square test and Bartlett Test. If the data passes one of these tests then the data is run through ANOVA and Dunnetts. If the data fails Chi-square test and Bartlett's Test then Steels Many One Test is used.

The acute *Daphnia pulex* and *Ceriodaphnia dubia* survival data is analyzed using Shipiro Wilks Test and Bartlett's Test. If the data passes both tests then the data is run through ANOVA and Dunnetts. If the data fails Shipiro Wilks Test or Bartlett's Test then Steels Many One Test is used.

605898 CoC Print Group 001 of 002

51569

Bio-Aquatic Testing, Inc.
2501 Mayes Road, Suite 100
Carrollton, TX 75006
Tel: 972-242-7750
Fax: 972-242-7749

FRESH WATER TEST SETUP FORM

Client: Ana-Lab

Permit AR0038822

Facility: Cooper Tire & Rubber Co.

Lab Number 51569

Outfall Name: NPDES 001

Number of samples 2

Dilution Water: Synthetic Lab

Receiving Water Name:

Dechlorinate Sample: No

Sx #	Rcvd Date	Rcvd Time	Sampling Dates: Begin Date	Sampling Dates: End Date	Sampling Times: Start	Sampling Times: End
1	03/12/13	08:15	03/10/13	03/11/13	07:40	07:40
2	03/13/13	08:30	03/10/13	03/12/13	07:40	07:40

Type of Test(s)	
Pimephales promelas	48 Hr Acute

Start Sx # 1 Date: 3/12/2013
Renew Sx # 2 Date: 3/13/2013
Renew Sx # ____ Date: ____
Renew Sx # ____ Date: ____
Renew Sx # ____ Date: ____
Renew Sx # ____ Date: ____
Renew Sx # ____ Date: ____

Controls: Synthetic
pH Match:
Hardness Match: moderate

Test Start Date: 3/12/2013
Test End Date: 3/14/2013

Pimephales Test Set Up: 5 Reps & 8 Organisms per Rep

Test Set Up:

Concentrations: 32 42 56 75 100 % LF % 100

Test Chemistry on these dilutions: 32 42 56 75 100

Samples received by:

◉ Greyhound	○ UPS Next Day	○ Delta Dash	○ Delta
○ Pony Express	○ Client Delivered	○ Southwest Airlines	○ DHL
○ Federal Express	○ American Airlines	○ Bio Pick Up	

Other:

605898 CoC Print Group 001 of 002

BIO-AQUATIC TESTING, INC.

Hardness, Alkalinity, Residual Chlorine, Specific Conductivity, and Salinity Analysis Data

Client: Ana-Lab **Lab ID:** 51569

Facility: Cooper Tire & Rubber Co. **Outfall:** NPDES 001

Dilution Water(s): Synthetic Lab **Test Date:** March 12, 2013

** 100 %

Effluent Sample #	Received Date	Received Time	** Residual Cl_2	DeChlor (ml/L)	** Ammonia mg/L	Analyst Initials	Initial Salinity	Adjusted Salinity	Temp. Received
1	3/12/13	08:15	<0.10	N/A	<0.25	DF	N/A	N/A	3.7
2	3/13/13	08:30	<0.10	N/A	<0.25	DF	N/A	N/A	3.9

Chlorine Analysis Method: Hanna Ion Specific Meter #193711 **Dechlorination Reagent:** Sodium Thiosulfate

Sample #	Received Date	Received Time	Hardness (EDTA) As mg/L $CaCO_3$ CON	Hardness (EDTA) As mg/L $CaCO_3$ 100	ALKALINITY TO END POINT pH 4.50 =/- 0.05 as mg/L $CaCO_3$ CON	ALKALINITY TO END POINT pH 4.50 =/- 0.05 as mg/L $CaCO_3$ 100	Analyst Initials
1	3/12/13	08:15	140.0	74.0	60.0	54.0	CH
2	3/13/13	08:30	140.0	130.0	60.0	107.0	CH

Date		Sample #	Values are at Highest Dilution: Specific Conductivity as umhos/cm	Values are at Highest Dilution: Salinity (ppt)	Values are at 100% Dilution: Residual Chlorine as mg Cl_2/L	Values are at 100% Dilution: 1 ml 0.02N $Na_2S_2O_3$/L	Analyst	Other
3/12	Lab H2O		379	0.2			JR	
3/13	Lab H2O		375	0.2			DS	
3/14	Lab H2O						DS	
3/15	Lab H2O							
3/16	Lab H2O							
3/17	Lab H2O							
3/18	Lab H2O							
3/12	OUTFALL*	1	187	0.1	<0.10	N/A	JR	
3/13	OUTFALL*	2	417	0.2	<0.10	N/A	DS	
3/14	OUTFALL*						DS	
3/15	OUTFALL*							
3/16	OUTFALL*							
3/17	OUTFALL*							
3/18	OUTFALL*							

*Conductivity is taken on the highest remaining effluent concentration used for test renewal, not necessarily 100%

605898 CoC Print Group 001 of 002

BIO-AQUATIC TESTING, INC.

pH, Dissolved Oxygen

48 Hr Acute **Pimephales promelas**

Client: Ana-Lab **Lab ID:** 51569

Facility: Cooper Tire & Rubber Co. **Dilution Water(s):** Synthetic Lab

Outfall: NPDES 001 **Test Begin Date:** March 12, 2013

NR indicates that the test is non-renewal.

ANALYST	DATE	TIME	SX#	UNIT	Concentration: Control	32	42	56	75	100		
JR	3/12	Start	1	pH	8.0	7.9	7.7	7.7	7.6	7.5		
		25 ± 1		DO (mg/L)	9.2	8.7	9.0	9.3	9.4	9.9		
DS	3/13	24 Hr	1	pH	7.8	7.7	7.7	7.7	7.7	7.6		
		25 ± 1		DO (mg/L)	8.6	8.6	8.6	8.5	8.4	8.3		
		Renew	2	pH	7.9	7.9	7.9	7.8	7.7	7.6		
				DO (mg/L)	8.6	8.5	8.5	8.4	8.4	8.4		
DS	3/14	48 Hr	2	pH	8.0	8.0	8.0	7.9	7.9	7.8		
		25 ± 1		DO (mg/L)	8.3	8.2	8.2	8.1	8.0	7.9		
		Renew		pH								
				DO (mg/L)								
	3/15	72 Hr		pH								
		25 ± 1		DO (mg/L)								
		Renew		pH								
				DO (mg/L)								
	3/16	96 Hr		pH								
		25 ± 1		DO (mg/L)								
		Renew		pH								
				DO (mg/L)								
	3/17	120 Hr		pH								
		25 ± 1		DO (mg/L)								
		Renew		pH								
				DO (mg/L)								
	3/18	144 Hr		pH								
		25 ± 1		DO (mg/L)								
		Renew		pH								
				DO (mg/L)								
	3/19	168 Hr		pH								
		25 ± 1		DO (mg/L)								

Appendix B

Pimephales promelas

BIO-AQUATIC TESTING, INC.

Carrollton, TX

REFERENCE TOXICANTS

Bio-Aquatic Testing conducts reference toxicant testing monthly for organisms cultured in-house. For studies requiring purchased organisms, reference toxicant testing is performed simultaneously. Reference toxicant testing validates data and measures organism consistency. Only reagent grade chemicals are used of the following choices: sodium laurel sulfate (SLS), copper sulfate, copper chloride, potassium chloride, and sodium chloride. Organism responses are tracked with control charts for each reference toxicant/organism combination. The data are examined for sensitivity trends and to determine if results are within EPA described limits.

ACUTE REFERENCE TOXICANT TEST RESULTS

DILUTION WATER:	Standard Synthetic Freshwater
CHEMICAL:	Sodium Chloride
DURATION:	48 Hour Acute
TEST NUMBER:	253
PROJECT NUMBER:	53840
START DATE:	2/27/2013
START TIME:	14:54
TOTAL NUMBER EXPOSED:	40 organisms per concentration

CONCENTRATIONS (mg/L):	CON	2000	4000	6000	8000	10000	12000
NUMBER DEAD PER CONCENTRATION:	0	0	0	1	1	22	40

TEST METHODS:	As listed in EPA-821-R-02-012
STATISTICAL METHODS:	SURVIVAL: Trimmed Spearman-Karber
LC50:	9652.27 mg/L
95% LOWER CONFIDENCE LIMITS:	9289.32 mg/L
95% UPPER CONFIDENCE LIMITS:	10029.40 mg/L

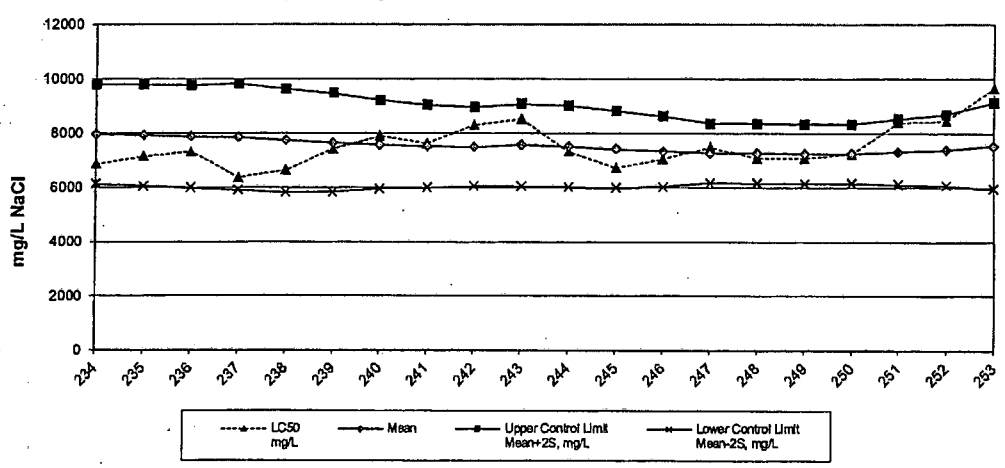
605898 CoC Print Group 002 of 002

Bio-Aquatic Testing, Inc.

REFERENCE TOXICANT STATISTICAL RESULTS: LC_{50} AND CONTROL LIMITS
Pimephales promelas EXPOSED TO SODIUM CHLORIDE, 48 HOUR STATIC RENEWAL

Test Number	Date	Project Number	Toxicant Lot Number	Statistical Method	LC_{50} mg/L	Mean	Twice Standard Deviation 2S	Upper Control Limit Mean+2S, mg/L	Lower Control Limit Mean-2S, mg/L
233	6/29/2011	48483	023007	Trimmed Spearman-Karber	6503.2	7950.1	1884.6	9834.7	6065.6
234	7/27/2011	48944	023007	Trimmed Spearman-Karber	6874.8	7967.4	1835.4	9802.8	6132.0
235	8/30/2011	49054	023007	Trimmed Spearman-Karber	7133.5	7926.0	1872.9	9799.0	6053.1
236	9/29/2011	49213	023007	Trimmed Spearman-Karber	7315.3	7885.9	1890.0	9775.9	5996.0
237	10/26/2011	49501	023007	Trimmed Spearman-Karber	6368.1	7863.6	1952.9	9816.4	5910.7
238	11/28/2011	49800	023007	Trimmed Spearman-Karber	6652.4	7732.7	1906.3	9639.0	5826.4
239	12/28/2011	50693	023007	Trimmed Spearman-Karber	7435.6	7657.2	1821.9	9479.2	5835.3
240	1/18/2012	50766	023007	Trimmed Spearman-Karber	7918.8	7585.2	1643.7	9228.8	5941.5
241	2/23/2012	50858	023007	Trimmed Spearman-Karber	7625.5	7523.3	1530.3	9053.6	5993.0
242	3/28/2012	50953	023007	Trimmed Spearman-Karber	8315.7	7500.3	1463.6	8963.9	6036.7
243	4/24/2012	51029	023007	Trimmed Spearman-Karber	8542.0	7566.2	1528.5	9094.7	6037.7
244	5/29/2012	51139	023007	Trimmed Spearman-Karber	7334.7	7522.2	1500.3	9022.4	6021.9
245	6/26/2012	51227	134905	Trimmed Spearman-Karber	6732.0	7423.2	1429.4	8852.5	5993.8
246	7/31/2012	51362	134905	Trimmed Spearman-Karber	7048.6	7343.2	1315.3	8658.6	6027.9
247	8/28/2012	51423	134905	Trimmed Spearman-Karber	7498.9	7273.3	1098.3	8371.6	6175.0
248	9/25/2012	51611	134905	Trimmed Spearman-Karber	7081.2	7260.6	1101.1	8361.8	6159.5
249	10/31/2012	51787	134905	Trimmed Spearman-Karber	7082.2	7244.1	1101.4	8345.6	6142.7
250	11/28/2012	52178	134905	Trimmed Spearman-Karber	7248.8	7253.6	1098.0	8351.6	6155.6
251	12/27/2012	53578	134905	Trimmed Spearman-Karber	8411.5	7317.2	1211.6	8528.8	6105.6
252	1/30/2013	53774	134905	Trimmed Spearman-Karber	8457.2	7379.0	1312.9	8691.9	6066.1
253	2/27/2013	53840	221401	Trimmed Spearman-Karber	9652.3	7536.5	1595.5	9132.0	5940.9

Pimephales promelas Acute Control Chart



APPENDIX C

LITERATURE REFERENCES

U.S.E.P.A., 2002. Short-Term Methods For Estimating The Chronic Toxicity Of Effluents And Receiving Water To Freshwater Organisms (Fifth Edition) U.S. Environmental Protection Agency, Office of Water, Washington D.C., EPA-821-R-02-012.

U.S.E.P.A., 2002. Short-Term Methods For Estimating The Chronic Toxicity Of Effluents and Receiving Water To Marine And Estuarine Organisms (Third Edition) U.S. Environmental Protection Agency, Office of Water, Washington D.C., EPA-821-R-02-014.

U.S.E.P.A., 2002. Short-Term Methods For Estimating The Chronic Toxicity Of Effluents And Receiving Water To Freshwater Organisms (Fourth Edition) U.S. Environmental Protection Agency, Office of Water, Washington D.C., EPA-821-R-02-013.

U.S.E.P.A., 1991. Technical Support Document For Water Quality-Based Toxics Control, U.S. Environmental Protection Agency, EPA-505-2-90-001.

Zarr, Jerrold, H., 1984. Biostatistical Analysis, (Second Edition). Prentice-Hall, Inc., Englewood Cliffs, N.J.

CHAIN-OF-CUSTODY SHEETS

Appendix D

BIO-AQUATIC TESTING, INC.
2501 MAYES RD., STE. 100
CARROLLTON, TX 75006
PH: 972-242-7750 FAX: 972-242-7749

CHAIN OF CUSTODY

☐ Bio Only: No Sample Left

Lab Id : 51569

Please Review & Complete Sections A, B, C, & D.

Sample No: 51569 -

Check Sample No. : X First, ____ Second, or ____ Third.

P.O. No:

Client: Ana-Lab

Facility: Cooper Tire & Rubber Co.

Permit No: AR0038822

Outfall: NPDES 001

Client Contact: ROY WHITE

Client Phone: 903-984-0551

A. REVIEW SCHEDULED TEST(s):

48 Hr Acute	Pimephales promelas

Concentration: 32 42 56 75 100

(For TX) Setup separate 24hr Acute Test? ____

To Ship the 1st Sample on: 3/12/2013

B. Use area below to make changes, if the Scheduled Test(s) in "A" are incorrect:

Freshwater Species					Saltwater Species	
C. dubia (water flea)	*D. pulex* (water flea)	*D. magna* (water flea)	*P. promelas* (minnow)	*Selenastrum* (green algae)	*M. beryllina* (minnow)	*Mysidopsis* (shrimp)
☐Chronic ☐96 Hour ☐48 Hour ☐24 Hour	☐Chronic ☐96 Hour ☐48 Hour ☐24 Hour	☐Chronic ☐96 Hour ☐48 Hour ☐24 Hour	☐Chronic ☐96 Hour ☒48 Hour ☐24 Hour	☐96 Hour ☐48 Hour ☐24 Hour	☐Chronic ☐96 Hour ☐48 Hour ☐24 Hour	☐Chronic ☐96 Hour ☐48 Hour ☐24 Hour

Notes: Bi-Monthly Fathead
Has WET Limit
Send off total and dissolved zinc for each sample. (BG) TRC = 0.01 mg/L

C.

	Sample ID or Location: (Outfall No. or Name)	Sample Type: E = Effluent RS = Rec. Stream S = Sediment	Sample Date From	Sample Date To	Sample Time (military) From	Sample Time (military) To	Grab or Composite	Sampled By: (Sign and Print Name)	Number Of Containers Shipped
1	Outfall 001	E	3/10/13	3/11/13	0740	0740	Comp	Charles Allen	1
2									
3									

D.

	Relinquished By:	Date	Time	Received By:	Date	Time
1	Charles O. Allen	3/11/13	0820		3-12-13	0815
2						
3						

Bio-Aquatic Sample Login

ANALYTICAL TESTING REQUIRED

BAT sample personnel: ○ Yes ● No

Check for Ammonia: ○ Yes ◉ No

Dechlorinate Sample: ○ Yes ◉ No

Dilution Water: ○ Receiving Stream ◉ Synthetic Lab

Date: 3-12	Time: 0840	By:			
Temperature: 3.7 (C)	Int. Salinity:	ppt	Adj. Salinity:	ppt	
Chlorine: 0.1 mg/l	Ammonia: 0.26	Other:			
pH: 7.2	DO: 9.9 mg/l	Condition:	Good		

BIO-AQUATIC TESTING, INC.
2501 MAYES RD., STE. 100
CARROLLTON, TX 75006
PH: 972-242-7750 FAX: 972-242-7749

CHAIN OF CUSTODY

☐ Bio Only: No Sample Left

Lab Id : 51569

Please Review & Complete Sections A, B, C, & D.

Sample No: 51569 –

Check Sample No. : ____ First, X Second, or ____ Third.

P.O. No:

Client: Ana-Lab

Facility: Cooper Tire & Rubber Co.

Permit No: AR0038822

Outfall: NPDES 001

Client Contact: ROY WHITE

Client Phone: 903-984-0551

A. REVIEW SCHEDULED TEST(s):

48 Hr Acute	Pimephales promelas

Concentration: 32 42 56 75 100

(For TX) Setup separate 24hr Acute Test?

To Ship the 1st Sample on: 3/12/2013

B. Use area below to make changes, if the Scheduled Test(s) in "A" are incorrect:

Freshwater Species					Saltwater Species	
C. dubia (water flea)	*D. pulex* (water flea)	*D. magna* (water flea)	*P. promelas* (minnow)	*Selenastrum* (green algae)	*M. berylllina* (minnow)	*Mysidopsis* (shrimp)
☐Chronic ☐96 Hour ☐48 Hour ☐24 Hour	☐Chronic ☐96 Hour ☐48 Hour ☐24 Hour	☐Chronic ☐96 Hour ☐48 Hour ☐24 Hour	☐Chronic ☐96 Hour ☒48 Hour ☐24 Hour	☐96 Hour ☐48 Hour ☐24 Hour	☐Chronic ☐96 Hour ☐48 Hour ☐24 Hour	☐Chronic ☐96 Hour ☐48 Hour ☐24 Hour

Notes: Bi-Monthly Fathead
Has WET Limit
Send off total and dissolved zinc for each sample. (BG) TRC = 0.00 mg/L

C.

Sample ID or Location: (Outfall No. or Name)	Sample Type: E = Effluent RS = Rec. Stream S = Sediment	Sample Date From	Sample Date To	Sample Time (military) From	Sample Time (military) To	Grab or Composite	Sampled By: (Sign and Print Name)	Number Of Containers Shipped
1 Outfall 001	E	3/11/13	3/12/13	0740	0840	Comp	Charles Allen	1
2								
3								

D.

Relinquished By:	Date	Time	Received By:	Date	Time
1 Charles Allen	3/12/13	0840		3-13	
2				3-13	0830
3					

Bio-Aquatic Sample Login

ANALYTICAL TESTING REQUIRED

BAT sample personnel: ○ Yes ◉ No

Check for Ammonia: ○ Yes ◉ No

Dechlorinate Sample: ○ Yes ◉ No

Dilution Water: ○ Receiving Stream ◉ Synthetic Lab

Date: 3-13	Time: 0919	By: L			
Temperature: 3.9 (C)	Int. Salinity:	ppt	Adj. Salinity:	ppt	
Chlorine: 0.1 mg/l	Ammonia: 0.25	Other:			
pH: 7.5	DO: 9.9 mg/l	Condition:			

REGULATORY AGENCY TABLES

Appendix E

ANA-LAB CORP.®
THE COMPLETE SERVICE LAB

605898 CoC Print Group 002 of 002

Table 1 (Sheet 1 of 1)
BIOMONITORING REPORT

Pimephales promelas SURVIVAL TEST

Permittee: Ana-Lab - Cooper Tire & Rubber Co.
Permit No.: AR0038822
Outfall No.: NPDES 001

		Date/Time		Date/Time
Dates and times	FROM:	3/10/2013 @07:40	TO:	3/11/2013@ 07:40
Composites were collected:	FROM:	3/11/2013 @07:40	TO:	3/12/2013@ 07:40

Test Initiation: Time: 18:00 Date: 3/12/2013

Dilution Water Used: [ ] Receiving Water [X] Synthetic Dilution Water

DATA TABLE FOR SURVIVAL OF *Pimephales promelas*

TIME	REPLICATE	EFFLUENT CONCENTRATION (%)					
		0%	32 %	42 %	56 %	75 %	100 %
24 HOUR	A	100	100	100	100	100	100
	B	100	100	100	100	100	100
	C	100	100	100	100	100	100
	D	100	100	100	100	100	100
	E	100	100	100	100	100	100
48 HOUR	A	100	100	100	100	100	100
	B	100	100	100	100	100	100
	C	100	100	100	100	100	100
	D	100	100	100	100	100	100
	E	100	100	100	100	100	100
MEAN		100	100	100	100	100	100
CV %[1]		0.00	0.00	0.00	0.00	0.00	0.00

[1] Coefficient of Variation = (standard deviation/mean) x 100)

?= cannot be calculated due to 100% mortality or lab exception

DUNNETT'S PROCEDURE OR STEEL'S MANY-ONE RANK TEST (as appropriate for Lethality)

Is the mean survival at 48 hours significantly different (p=0.05) than the control's survival for the low flow or critical dilution?

CRITICAL DILUTION (100 %): _____ YES X NO

If you report NO, enter a '0' on the DMR form for Parameter No. TEM6C, other wise enter a '1'.

Enter the percent effluent corresponding to each NOEC below:

NOEC SURVIVAL: 100 % Effluent (Parameter TOM6C)

LOEC SURVIVAL: Q* % Effluent (Parameter TXM6C)

Q* refers to a value that is not calculable

Prepared by: Deanna Blake Approved by: Ch. Robson

CERTIFIED MAIL™

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COOPERTIRES

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Water Division - Enforcement Branch
5301 Northshore Drive
North Little Rock, AR 72118-5317